

~~WO 2005/007296~~ ~~PCT/EP2004/007518~~

~~CLAIMS:~~ WE CLAIM:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) ~~Centrifuge having at least one centrifugal drum, having a stack of discs (21),~~

~~characterized in that~~

~~_____ a) the centrifuge has at least two centrifugal drums (2,3) which can each be rotated about two axes of rotation (A1, A2)~~

~~_____ b) one of the axes of rotation respectively extending through the center of gravity of the centrifugal drums such that one of the axes of rotation (A1) is in each case situated within the at least one or more centrifugal drum(s) and the other axis of rotation (A2) is preferably situated outside the centrifugal drum(s) (2, 3);~~

~~_____ c) one of the disc stacks (21) respectively being inserted into the drums.~~
A
centrifuge, comprising:

at least two centrifugal drums, each drum including a disc stack and each drum being rotatable about first and second axes of rotation; and

the first axis of rotation extends through a center of gravity of and is within each drum, and the second axis of rotation is situated outside each drum.

2. (Currently Amended) ~~Centrifuge~~ The centrifuge according to Claim 1,
~~characterized in that wherein the two axes of rotation extending through the center of gravity of each drum and are oriented either parallel to one another and, in particular, or are aligned with one another.~~

3. (Currently Amended) ~~Centrifuge~~ The centrifuge according to Claim 1 ~~or 2,~~
~~characterized in that, wherein~~ the centrifugal drums ~~(2, 3)~~ have a continuous basket shell.

4. (Cancelled)

5. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the~~
~~preceding claims, characterized in that the~~ Claim 1, wherein a maximal rotational speed of the
centrifugal drums ~~(2, 3)~~ about the first axis of rotation (A1) is higher than ~~the a~~ maximal
rotational speed about the second axis of rotation ~~(A2)~~.

6. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the~~
~~preceding claims, characterized in that~~ Claim 1, wherein the two centrifugal drums ~~(2, 3)~~ are
arranged opposite one another, and ~~in that the~~ first axes of rotation (A1) of the two
centrifugal drums ~~(2, 3)~~ are aligned with one another.

7. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the~~
~~preceding claims, characterized in that~~ Claim 1, wherein the second axis of rotation (A2) is
arranged perpendicular to the first axis of rotation (A1) of each drum and crosses ~~the each~~ first
axis of rotation ~~(A1)~~.

8. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the~~
~~preceding claims, characterized in that~~ Claim 1, wherein the two centrifugal drums ~~(2, 3)~~ have
a double-conical construction including two mutually oppositely oriented inner and outer
conical sections ~~(4, 5)~~, each of the conical sections being constructed at ~~the an~~ end area,
~~which is inside relative to the second axis of rotation (A2), and at the end area, which is~~
~~outside relative to the axis of rotation,~~ of the centrifugal drums ~~(2, 3)~~.

9. (Currently Amended) ~~Centrifugal~~ The centrifugal drum according to ~~one of the preceding claims, characterized in that~~ Claim 8, wherein the inner and outer ~~two~~ conical sections (4, 5) of each centrifugal drum (2, 3) are mutually connected by ~~way of~~ central cylindrical sections ~~(6)~~.

10. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the preceding claims, characterized in that~~ Claim 8, wherein relative to the first axis of rotation (A1), the outer conical sections 5 are each preferably conically constructed at an acute angle, the angle of taper α with respect to the first axis of rotation (A1), the angle amounting to 60° and or less.

11. (Currently Amended) ~~Centrifuge~~ The Centrifuge according to ~~one of the preceding claims, characterized in that~~ Claim 1, wherein the disc stack (21) ~~with conical discs (21) is in each case~~ is arranged concentrically with respect to the a feeding pipe (10) in both each of the centrifugal drums (2, 3).

12. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the preceding claims, characterized in that~~ Claim 1, wherein the disc stack (21) ~~has~~ includes rising ducts ~~(22)~~.

13. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the preceding claims, characterized in that~~ Claim 8, wherein at ~~the outer an~~ end of the outer conical sections (5), discharge openings (7) for a solid phase are constructed ~~which are~~ and oriented concentrically with respect to the first axis of rotation ~~(A1)~~.

14. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the preceding claims, characterized in that~~ Claim 8, wherein each drum includes cylindrical attachments (8) ~~are shaped onto the inner conical sections (4) toward the second axis of rotation (A2), which attachments (8) are disposed in the carrier elements (10) connected by means of bearings (9).~~

15. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the preceding claims, characterized in that, in~~ Claim 1, wherein each case, one drum includes a centric feeding pipe (11) ~~for the centrifugal material and also includes~~ discharge ducts (12) ~~extend~~ extending through the cylindrical attachments (8).

16. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the preceding claims, characterized in that~~ Claim 1, wherein each centrifugal drum (2, 3) ~~has~~ includes a first driving device (16) ~~for driving the centrifugal drum (2, 3) about the first axis of rotation (A1).~~

17. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the preceding claims, characterized in that~~ Claim 1, wherein the two centrifugal drums (2, 3) ~~have~~ a common driving device (16) ~~for driving the centrifugal drum drums (2, 3) about the first axis of rotation (A1).~~

18. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the preceding claims, characterized in that~~ Claim 16, wherein the two centrifugal drums (2, 3) ~~as well as the two and their~~ driving devices (16) are arranged on at least one rotatable ring (17) ~~which is rotatably disposed.~~

19. (Currently Amended) ~~Centrifuge~~ The centrifuge according to ~~one of the~~
~~preceding claims, characterized in that~~ Claim 18, wherein the at least one rotatable ring (17) is
horizontally aligned and is rotatably disposed by ~~means of bearings (18) on a base structure~~
(19).